

ABSTRACT

A method for collecting computed tomography (CT) image data includes determining a number of intervals N into which a respiratory cycle is to be divided, determining a number of respiratory cycles M to be covered in one
5 gantry rotation, and rotating a gantry to collect at least $M \times N$ sets of CT image data of at least a portion of a patient, wherein each set of the CT image data corresponds to a phase of a respiratory cycle.